

The Forest Raptor Project

James E. Woodford
Research Biologist, EIM
&
Loren Ayers
Ecologist, EIM



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Partner Agencies & Organizations:

- Chequamegon-Nicolet National Forest
 - Marshfield Medical Research Foundation
 - US Fish & Wildlife Service
 - Wisconsin Falconers Association
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The Wisconsin Department of Natural Resources (DNR) has been collecting information on Forest Raptor species for sometime. Many departmental priorities are associated with this group of birds or the habitats they utilize. Some examples include the development of forest management recommendations for all forest raptors and estimating population numbers of Northern Goshawks (a species of special concern) and Red-shouldered Hawks (a threatened species). Beginning in 2002, staff from the Bureaus of Endangered Resources (ER), Integrated Science Services (ISS), Wildlife Management (WM), and Division of Forestry (FR) began collaborating as the Forest Raptor Working Group to meet objectives established for forest raptors by the Department. This integrated approach is vital to the project's success because it significantly increases project efficiency through cross-program sharing of resources and staff expertise. Overall project direction and budget allocation are provided by an Oversight Group, which consists of supervisors from all four programs.

A number of Forest Raptor Project activities were initiated in 2002. These included the forest raptor

display and workshops, development and implementation of monitoring protocols, and training of the Forest Raptor Volunteer Network. The success of the project requires coordination and integration of all activities simultaneously. For example, success of the monitoring work requires training of field staff and reference tools from education and training activities, which in turn increases awareness and identification abilities of field staff. Increasing field staff awareness benefits the Working Group because it allows members of the Volunteer Network to complete nest validations (i.e., verification of nest reports). Training efforts also improve communication between land managers and forest raptor staff, which aids in developing timber management guidelines that protect active nesting territories.

Objectives:

1. Develop and implement outreach and training materials concerning forest raptors
2. Monitor active Northern Goshawk territories and maintain GIS databases
3. Develop and evaluate management guidelines for Northern Goshawk and Red-Shouldered Hawk territories on state-managed lands
4. Determine the presence of and risks associated with West Nile Virus in Northern Goshawks

Methods: Experienced staff will visit each selected territory prior to the leaf-out period. During this visit, staff will record all new nests encountered with GPS, attempt to determine breeding activity, and record nest validation data of inactive nests. During all visits, except incubation, staff will search the area looking for prey remains and pellets that will be collected and frozen for future prey studies. In partial support of the training effort, ISS, BER, WM, and FR have developed an educational poster

for the Northern Goshawk and 5"x7" field identification cards on seven forest raptors for free distribution to county, state, and federal offices as well as private and nonprofit organizations. The intended benefit is increased passive educational opportunities, improved field identification, and awareness of the species. In addition, the poster includes a solicitation for assistance in locating and monitoring Northern Goshawk nests.

For the educational / training objective, we have developed a traveling display both and a 1-day training workshop. Workshops and booth displays are presented at DNR service centers or conference facilities throughout the forested regions of Wisconsin (primarily northern WI). The intended audience is DNR land managers (primarily foresters and wildlife managers), county and federal forestry staff, industrial foresters, and private non-industrial forest owners and association members.

Preliminary Results: We field checked 43 territories for Northern Goshawk activity in 2002. Eighteen of the territories had occupied nests and at least three others had adults present with no active nest found. Overall, 14 young were produced at seven successful nests, resulting in preliminary productivity measures of 1.0 young/active nest, 2.0 young/successful nest, and a 50% nest success rate. These results may change slightly because the outcomes of two active nests remain unknown at this time. DNR staff followed four of the failed and four of the successful nests during the entire breeding period. The final check to count young at the other 10 active nests was completed by non-DNR cooperators. We observed nest failure, caused by mammal predation, at one nest. No reason for failure was apparent at the other three nests.

The Northern Goshawk poster contains information specific to its identification, life-history, nest site characteristics, distribution and phenology. Over 1000 posters have been distributed to DNR resource and field staff, service centers, staff from other agencies, and to schools and conservation groups for educational purposes.

The Forest Raptor Working Group developed a traveling booth display on forest raptors of Wisconsin that provided educational information and handouts on raptor identification, habitat requirements, and forest management considerations. We displayed the booth at four professional meetings in 2002.

Two one-day workshops were held for staff of DNR and other land management agencies in both 2002 and 2003. A total of 75 resource professionals have participated in the Forest Raptor Workshops. Participants included staff from the Division of Forestry, Bureau of Wildlife Management, and Bureau of Endangered Resources, the US Forest Service, County Forest Departments, and private industry.

Upcoming Products: The following products are planned for future work. All are contingent on continued support and funding of the Forest Raptor Project.

- Workshops and training opportunities for the general public
- Statewide timber harvest guidelines for the Red-shouldered Hawk and Northern Goshawk
- A coordinated Statewide Red-shouldered Hawk population survey
- A statewide Northern Goshawk population estimate

Management Applications:

1. The workshops and other educational materials are designed to educate and increase awareness of forest raptors for professional field staff. This effort should increase the number of known territories and assist land managers in developing management guidelines for these species of wildlife.
2. The status of the Northern Goshawk is periodically subject to change (e.g., moved from a species of special concern to threatened or endangered). Data from monitoring activities will provide the scientific evidence necessary to defend such action.
3. Tissue sampling and analysis will help determine susceptibility and risk of West Nile Virus to Northern Goshawks. In addition, this work will assist in assay development and blood serum neutralization validation efforts.
4. With completion of our guideline evaluation objective, we will be able to provide statewide timber harvest guidelines that are scientifically sound.

Timeline:

2003 - Continue education and outreach activities. Continue to monitor Northern Goshawk territories. Develop management guidelines on a site-by-site case.

2004 - Expand education and outreach activities to the general public. Continue to monitor Northern Goshawk territories. Develop new and begin evaluating past management guidelines implemented for timber harvest activities.

2005 - Continue education and outreach activities. Continue to monitor Northern Goshawk territories. Continue evaluating management guidelines implemented for timber harvest activities.

2006 - Continue to monitor Northern Goshawk territories. Complete the evaluation of management guidelines. Develop statewide management guidelines based on evaluation study.